

# **Clinical Policy: Cochlear Implant Replacements**

Reference Number: PA.CP.MP.14 Effective Date: 01/2018 Date of Last Revision: 06/2024

<u>Revision Log</u> Coding Implications

## Description

This policy outlines medical necessity criteria for the replacement of cochlear implants and/or cochlear implant components. The cochlear implant has four basic components: a microphone, worn externally behind the ear, which picks up sounds; an external speech processor, which converts sounds to electrical signals; a transmitter and receiver/stimulator, which forward the signals; and implanted electrodes, which stimulate the fibers of the auditory nerve.<sup>6</sup>

## **Policy/Criteria**

- I. It is the policy of PA Health and Wellness<sup>®</sup> (PHW) that *replacement* of a cochlear implant(s) and/or its external components (external speech processor, controller, etc.) is considered medically necessary when any one of the following is present:
  - **A.** The existing device(s) is no longer functional and cannot be repaired;
  - **B.** A change in the member/enrollee's condition makes the existing unit(s) inadequate for the hearing-related activities of daily living and improvement is expected with a replacement unit(s);
  - **C.** The existing component has reached the limit of its reasonable useful life. The reasonable useful life of a sound processor is not less than five years.
- **II.** It is the policy of PHW that *replacement or upgrade* of an existing, properly functioning cochlear implant and/or its external components (external speech processor, controller, etc.) is considered **not medically necessary** when requested only for convenience or to simply upgrade to a newer technology.

## Background

Sensorineural hearing loss, or nerve deafness, is a type of hearing loss that results from problems with the inner ear, related to the cochlea, eighth nerve, internal auditory canal, or brain. A common cause of hearing loss in adults is presbycusis, a progressive condition caused by the loss of function of hair cells in the inner ear.<sup>7</sup> Severe to profound hearing loss in children is most often related to genetics, prenatal, perinatal, or postnatal causes.<sup>5</sup> A cochlear implant, an electronic device surgically placed under the skin, bypasses the hair cells and directly transmits sounds through multiple electrodes, which stimulate the auditory nerve.<sup>7</sup> Once the auditory nerve is activated, signals are sent to the brain. The brain learns to recognize these signals and the person experiences this as hearing.<sup>2</sup>

Cochlear implants have been studied since the 1950s and were approved by the FDA in adults in the mid-1980s.<sup>2,5</sup> National Institute of Health (NIH) scientists determined cochlear implants to be cost beneficial.

Recent studies have been conducted evaluating the use of bilateral cochlear implants compared to unilateral implants. Many of these studies have shown that children obtained significantly higher hearing thresholds in the bilateral implants. Speech recognition scores in noisy conditions were also improved in bilateral users, while speech perception outcomes in quiet conditions were



## **CLINICAL POLICY Cochlear Implant Replacements**

mixed demonstrating differences for only two out of seven outcome measures.<sup>1,8</sup> Studies also have shown better scores on sentence and word recognition tests for bilateral users.<sup>1</sup>

Very little data has been published comparing differences between bilateral cochlear implants and cochlear implant with a hearing aid on the opposite ear. One small study showed improved localization abilities and speech perception scores for two former users of cochlear implant/hearing aid within the first six months after the second implant was activated. However, performance showed a slight decline after six months of use. Further studies are needed in this area to determine efficacy for bilateral cochlear implants in adults.<sup>1</sup>

While evidence is increasing regarding the use of bilateral implants, bilateral implantation is not without problems. Limited nerve survival that remains may be asymmetrical, resulting in an unnatural pattern of neural activity in stimulation with electrical pulses. This asynchronous stimulation across devises might result in individual neural impulses which are unlikely to result in useful cues related to interaural differences. Also, bilateral implantation doubles the risks associated with surgical intervention and is very costly.<sup>2</sup>

#### **Coding Implications**

This clinical policy references Current Procedural Terminology (CPT<sup>®</sup>). CPT<sup>®</sup> is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2023, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT <sup>®*</sup>	Description
Codes	
69949	Unlisted procedure, inner ear

# CLINICAL POLICY Cochlear Implant Replacements



HCPCS	Description
Codes	
L8615	Headset/headpiece for use with cochlear implant device, replacement
L8616	Microphone for use with cochlear implant device, replacement
L8617	Transmitting coil for use with cochlear implant device, replacement
L8618	Transmitter cable for use with cochlear implant device, replacement
L6819	Cochlear implant, external speech processor and controller, integrated system,
	replacement
L8621	Zinc air battery for use with cochlear implant device and auditory osseointegrated
	sound processors, replacement
L8622	Alkaline battery for use with cochlear implant device, any size, replacement
L8623	Lithium ion battery for use with cochlear implant device speech
	processor, other than ear level replacement
L8624	Lithium ion battery for use with cochlear implant device speech-
	processor, ear level replacement, each
L8627	Cochlear implant, external speech processor, component, replacement
L8628	Cochlear implant, external controller component, replacement
L8629	Transmitting coil and cable, integrated, for use with cochlear implant device,
	replacement

Reviews, Revisions, and Approvals	Review Date	Approval Date
PA policy developed	09/17	01/18
Annual Review. References reviewed and updated.	09/18	
Added criteria for sound replacement if it is over 5 years old.	12/18	
Removed CPT 69717and 69718 and replaced with CPT 69949 References reviewed and updated. Codes review.	06/2020	8/7/2020
Annual review. References reviewed and updated. Coding reviewed, added codes L8621 and L8622. Replaced all instance of "member" with "member/enrollee." Changed "review date" in the header to "date of last revision" and "date" in the revision log header to "revision date."	8/31/2021	
Annual review completed. Removed "or" in I.A. and I.B. Background updated with no impact to criteria. References reviewed and updated.	2/20/2023	
Annual review completed. Changed verbiage in I.C. from "A sound processor replacement if the current processor is at least five years old" to "C. The existing component has reached the limit of its reasonable useful life. The reasonable useful life of a sound processor is not less than five years". Minor rewording with no clinical significance. Background updated with no impact to criteria. ICD-10-CM Diagnosis Code table removed. References reviewed and updated. External specialist reviewed.	07/2023	



Reviews, Revisions, and Approvals	Review Date	Approval Date
Annual review. Updated description and background with no clinical	06/2024	
significance. Coding reviewed, updated description for L8623. References reviewed and updated.		

#### References

- American Academy of Audiology. American Academy of Audiology Clinical Practice Guidelines: Pediatric amplification. <u>https://audiology-</u> web.s3.amazonaws.com/migrated/PediatricAmplificationGuidelines.pdf\_539975b3e7e9f <u>1.74471798.pdf</u> Published June 2013. Accessed May 6, 2024.
- 2. United States Food and Drug Administration. Cochlear implants. <u>http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthe</u> <u>tics/CochlearImplants/default.htm</u>. Published February 3, 2022. Accessed May 6, 2024.
- Yosefof E, Hilly O, Ulanovski D, Raveh E, Attias J, Sokolov M. Cochlear implant failure: diagnosis and treatment of soft failures. *Acta Otorhinolaryngol Ital*. 2021;41(6):566 to 571. doi:10.14639/0392-100X-N1583
- 4. North HJD, Lloyd SKW. Hearing rehabilitation in neurofibromatosis type 2. *Adv Otorhinolaryngol.* 2018;81:93 to 104. doi:10.1159/000485526.
- 5. Year 2019 position statement: Principles and guidelines for early hearing detection and intervention programs. *J Early Hear Detect Interv*. 2019; 4(2):1 to 44.
- Local coverage article: billing and coding: external components for cochlear implants (A53708). Centers for Medicare and Medicaid Services Web site. <u>https://www.cms.gov/medicare-coverage-</u> <u>database/search.aspx?redirect=Y&from=Overview</u>. Published October 1, 2015 (revised November 7, 2019). Accessed May 6, 2024.
- 7. Blevins NH. Presbycusis. UpToDate. <u>www.uptodate.com</u>. Updated April 18, 2022. Accessed May 6, 2024.
- National Institute for Health and Care Excellence (NICE). Cochlear implants for children and adults with severe to profound deafness: Technology appraisal guidance [TA566]. Published March 7, 2019. <u>https://www.nice.org.uk/guidance/ta566</u>. Accessed May 6, 2024.